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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee's Docket No.:   9381.00   )
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Group Art Unit: 3693   )
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Serial No.:   09/966,027   )
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Examiner: Kirsten Sachwitz Apple)
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Filing Date: September 28, 2001   )
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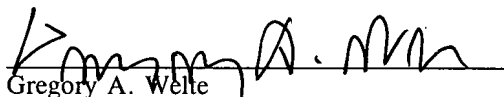Title: Methods and Apparatus for)
          Self Service Networks   )
)
_____   )

APPEAL BRIEF
A Summary of Argument Begins on Page 3

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Gregory A. Welte

1. REAL PARTY IN INTEREST

     NCR Corporation.

2. RELATED APPEALS AND INTERFERENCES

     None.

3. STATUS OF CLAIMS

     Claims 31 - 41 are pending, rejected, and appealed.

4. STATUS OF AMENDMENTS

No Amendment-After-Final is herewith submitted.

5. SUMMARY OF CLAIMED SUBJECT MATTER

Figure 1 of the Specification shows two networks 2-1 and 2-2 of ATMs, Automated Teller Machines. Figure 3 show ATMs 20 within those networks.

A customer of an ATM may be charged fees. (Specification, page 6, lines 8 - 11.) The invention varies the fees, depending on various factors, such as time-of-day, weather, and events in the vicinity. (Specification, page 6, lines 11 - 15 and paragraph bridging pages 6 and 7.)

As a specific example, data is gathered to identify trends in usage of an ATM, and those trends are correlated with other events. Consequently, it may be found that ATM usage increases when a sporting event occurs. The fees charged by the ATM may be increased at those times. (Specification, page 7, line 25 - page 8, line 10.)

Mapping of Claim Elements in the Independent Claim

Parenthetical phrases, in **bold typeface**, are inserted into the following independent claim, to identify matter in the Specification and Figures which supports the claim language adjacent said **bold, parenthetical typeface**.

31. A method of operating an ATM, comprising:

a) charging customers for services rendered by the ATM

(page 6, lines 8 - 11);

b) predicting a time when usage of the ATM by

customers will increase **(page 7, line 26 - page 8, line**

2), and

c) increasing charges at the ATM during said time

(page 8, lines 4 - 8).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The rejection of claims 31 - 41 as obvious under 35 USC §

103, based on Estes and Mishkin.

7. ARGUMENT

SUMMARY OF ARGUMENT

Point 1

Claim 35 recites:

> 35. Method according to claim 31, and
> further comprising:
>
> a) transmitting performance data from the
> ATM over a network to a server . . .; and
>
> b) analyzing the data to determine volume of
> transactions at particular times of the ATM.

The Final Action cites column 2, lines 25 - 58, of Estes to show both claim paragraphs (a) and (b).

That passage of Estes is outlined, beginning on page 20 herein, in the section entitled "CLAIM 35." That outline clearly indicates that this Estes-passage is primarily concerned with

    1) a computer monitor and printer at an ATM

    in Estes and

    2) switching control of both the monitor and

    the printer from one processor within the ATM

    to another processor within the ATM.

That passage is not concerned with either

    -- transmitting data to a server

    or

    -- "analyzing"

as claimed.

That passage in Estes fails to show claim 35. Thus, even if the references are combined, claim 35 is not attained.

Point 2

Claim 31 recites a "predicting" process and then increasing charges at an ATM.

The Final Action cites a computer monitor in Estes as showing the claimed "predicting."

Since, on the face of things, a computer monitor performs no

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"predicting," the Final Action is required to explain how the computer monitor in Estes shows the claim recitation.

That has not been done. The rejection cannot stand.

Point 3

As to increasing charges at an ATM in claim 31, the Final Action asserts that Mishkin shows this, in order to "capture the highest possible revenue."

However, in Mishkin's Figure 1, if you increase the price, you actually **decrease** total revenue. For example, at point E, the price is 750. Total revenue is 500 x 750, or 375,000. (Total revenue is the price of each item, multiplied by the total number of items sold.)

At point A, the price is 950. Total revenue is 950 x 100, or 95,000.

Thus, if the price is increased from 750 to 950, as from point E to A, then total revenue **DROPS** from 375,000 to 95,000.

Consequently, the Final Action's rationale for combining the references is incorrect. **Increasing** price in Mishkin causes a **decrease** in total revenue.

As a corollary, Mishkin teaches against the claimed increase in ATM charges. If you want to **increase** total revenue, you would **decrease** price in Mishkin's Figure 1. That is contrary to the claim (and, again, contrary to the Final Action's rationale for

combining the references).

Point 4

Point 4A

The Final Action is reducing the claims to a "gist," and then rejecting the invention thusly characterized, rather than rejecting the invention **as claimed**.

The "gist" appears in the first paragraph on page 3 of the Final Action, and in the "Examiner's Comments" on page 4.

The "gist" asserts that the invention merely increases fees at an ATM, and does nothing else. That is not so.

For example, claim 31 recites a "predicting" step (which has not been shown in the prior art.) Claim 35 recites obtaining "historical data" and "analysis" of the data. That has not been shown in the prior art.

Point 4B

The Final Action asserts that it is obvious to increase fees, to increase revenue. As explained herein, increasing fees in Mishkin actually **decreases** revenue.

Thus, the "gist" (ie, the invention as characterized by the Final Action) does not even operate as the Final Action proposes, and so cannot be rejected using the Final Action's rationale, because the rationale does not apply to the "gist".

Point 4C

If the "gist" is removed from the Final Action, then it appears that no teaching for combining the references exists, because that teaching is part of the "gist."

Therefore, Appellant submits that the "gist" should be removed, because irrelevant (it does not correspond to the claims) and because, as explained herein, a "gist" is prohibited by the MPEP.

After removal of the "gist," no rationale is present showing why the references should be combined, let alone a teaching which qualifies under section 103.

Point 5

Claim 33 recites reports on individual transactions.

Estes explicitly states that any reporting is of a summary nature, and **specifically excludes** reports on "individual transactions." (Column 3, line 15.)

That is directly contrary to claim 33, and militates against combining the references to attain claim 33.

This applies to claim 37.

END SUMMARY

ARGUMENT Re: OBVIOUSNESS REJECTION OF CLAIMS 31 - 41

CLAIM 31

Claim 31 recites:

> 31. A method of operating an ATM, comprising:
>
> a) charging customers for services rendered by the ATM;
>
> b) predicting a time when usage of the ATM by customers will increase, and
>
> c) increasing charges at the ATM during said time.

Appellant submits that the obviousness rejection is faulty, for several reasons.

Reason 1

Claim 31 recites "b) predicting a time when usage of the ATM by customers will increase." The Specification, page 7, line 27 - page 8, line 2, provides an example of a prediction.

The Final Action, page 2, asserts that the "monitor" in Estes' column 1, line 36, shows this claim recitation.

That cannot be so.

Estes' "monitor" is a **computer monitor**, that is, a television set. A computer monitor performs no "predicting," and the Final Action has not explained how it does so.

Apparently, the Final Action is asserting that some

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"monitoring" occurs in Estes, in the sense of "observing."

However, a computer monitor is so-named because it allows a human

observer to observe operations **within the computer**. That does

not correspond to the claimed "predicting."

Therefore, even if the references are combined, the claimed

invention is not attained. The claimed "predicting" is absent.

MPEP § 2143.03 states:

> To establish <u>prima facie</u> obviousness . . .
> **all the claim limitations** must be taught or
> suggested by the prior art.

Reason 2

The Final Action, page 3, asserts that Mishkin shows the

increase in charges of claim 31(c). The Final Action also

asserts that it is obvious to add Mishkin to Estes, in order to

"capture the highest possible revenue." (Final Action, middle of

page 3.)

However, Appellant points out that Mishkin teaches **precisely

the opposite**.

Consider Mishkin's Figure 1, which shows a demand curve B^d.

At point E, when the price is 750, 500 units are demanded. At

point A, at a higher price of 950, fewer units are demanded,

namely 100 units.

Total revenue for point E is 750 x 500, or 375,000.

Total revenue for point A is 950 x 100, or 95,000.

Therefore, if the price in Mishkin's Figure 1 is increased from 750 to 950, **total revenue DECREASES**.

Thus, Mishkin teaches exactly the **opposite** to what the Final Action asserts.

Consequently, the teaching used to combine the references is invalid.

<u>Reason 3</u>

REASON 3A

No expectation of success has been shown, as required by MPEP § 706.02(j), quoted herein.

The Final Action's motivation is to "capture the highest possible revenue." However, as explained above, a price increase in Mishkin causes total revenue to **decrease**. No expectation of success in "captur[ing] the highest possible revenue" has been shown.

REASON 3B

The claims recite (1) making a prediction and then (2) increasing ATM charges. The references, even if combined, do not show the increase in charges (or price).

That is, Mishkin does not discuss changing any prices. He merely explains how, for a given commodity (bonds), the price is

determined by the intersection of the supply and demand curves.

But that is a **single** price. He does not discuss changing it. Nor is it clear how he could do so, since, according to Mishkin, the price is determined by market forces, not by him.

Thus, there is no expectation of success in attaining the claimed invention (prediction-then-increase-in-charges), even if the references are combined.

-- No "prediction," as claimed, has been shown in the references.

-- No change in price is suggested by Mishkin.

Reason 4

Appellant submits that the Final Action's assertions regarding the well known price increases in telephone service and airline travel are

1) actually inconclusive as a teaching under section 103,

and

2) do not suggest ATM charges should be increased.

One reason is that it seems clear that the highest charges for telephones/airlines occur during the weekdays, because that is the time when businesses utilize those services most. The

telephone/airline companies **reduce** the charges on weekends, in order to attract customers when business is slack.

Thus, the discrepancy in pricing is not due to an increase in price during the week, but to a "fire sale" on weekends, in the attempt to recover whatever revenue is possible.

Thus, Appellant submits that telephone/airline pricing is not an analogous model to ATM pricing.

Consistent with this conclusion, Appellant points out that it is well known that Christmas is a high-traffic time for telephone calls. But if Christmas occurs on Sunday, Appellant is unaware that telephone companies raise prices at that time.

A second reason is that the undersigned attorney uses an ATM at a certain bank once or twice per week. No charges are imposed. But charges **ARE** imposed if he uses the same ATM card at another bank. This indicates that banks who operate ATMs do not seek to "capture the highest possible revenue" through ATM charges.

Even if the banks do seek to capture high revenue, it appears that they do this through a complex set of operations, which include persuading customers to maintain deposits in the banks, which the banks then invest in interest-bearing paper, and other pursuits.

Therefore, Appellant submits that it is clear that banks are not motivated to "capture the highest possible revenue" through

levying charges on ATM usage. As a minimum, it is submitted that the Final Action's rationale that banks do embark on such "capturing" is highly simplistic, and does not correspond to economic reality.

As to being simplistic, Appellant submits the following reduction ad absurdum argument. General Motors could raise the price of its Cadillac model to $ 200,000. It may sell one or two.

But it does not do so because it makes more profit by selling thousands of Cadillacs at $40,000 each (or whatever they cost).

Therefore, this Cadillac-example, and the Mishkin price increase from point E to A, both show that the Final Action's notion that prices should be blindly increased, to attain maximum revenue, is incorrect.

Maximum revenue is not attained by increasing prices.

Finally, the undersigned attorney points out that he has earned a B.A., majoring in economics, from Northwestern University. The science of microeconomics (which studies how businesses operate, as opposed to how governments operate) teaches that profit is maximized when marginal revenue equals marginal cost, not when price is highest. He offers to submit an affidavit on this point, from an economics professor, if the Board requests.

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That concept (pursuing the point where marginal revenue equals marginal cost) is contrary to the Final Action's notion that revenue is maximized when price is increased.

(Appellant realizes that profit is not the same as the revenue which the Final Action is considering. But this can be accommodated in any affidavit which the Board requests. Further, Appellant submits that the Final Action is considering the wrong variable. Profit is the variable of interest, not overall revenue.)

<u>Reason 5</u>

POINT 1

The Final Office Action, pages 3 and 4, in essence, reduces the invention to a "gist," and then rejects the invention thusly characterized. That is not allowed.

The invention **as claimed** must be rejected, and not something else. The Final Action is rejecting something else.

To repeat: the Final Action asserts that

> this case is about applying basic 101
> marketing and economic principles to an ATM
> transaction

and

> This concept has been used for centuries -
> charge more for phone calls at peak time or

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airline tickets or whatever is in demand
(Final Action, page 4).

These characterizations do not correspond to the claimed invention. Thus, they should be ignored, as irrelevant.

MPEP § 2141.02, second heading, states:

Distilling the Invention down to a "Gist" or "Thrust" . . . disregards "as a whole" requirement.

POINT 2

Appellant points out that the "gist" of the Final Action is inaccurate. The claims do not recite a mere price increase, but a **prediction** as well. And claim 35 recites historical data, and analyzing it.

The PTO's "gist" does not correspond to the claimed invention.

POINT 3

The rationale for combining the references is contained within the "gist" of the Final Action. Appellant submits that this "gist" should be ignored, because (1) it is irrelevant (it does not correspond to the claims) and (2) the MPEP prohibits it.

If the "gist" is ignored, then the rationale for combining the references disappears.

Conclusion as to Claim 31

Appellant submits that the rejection cannot stand.

CLAIM 32

Point 1

Claim 32 states that the "time" (when the charges are increased) coincides with "public events . . . near the ATM."

This has not been shown in the prior art. The Final Action relies on Official Notice to show this.

In response, the undersigned attorney respectfully traverses the Official Notice, and requests a citation of evidence showing the Noticed subject matter. (See MPEP § 2144.03.)

One reason is that it is not clear what, exactly, is being Noticed, as Point 2, below, explains.

Point 2

It appears that the Final Action is only Noticing public events occurring near an ATM. That does not show the claim.

The mere presence of a public event near an ATM does not imply that the ATM has raised charges at that time. The claim recites the latter.

Therefore, even if the Official Notice be accepted, it does not show the claim.

CLAIMS 33 AND 37

Claim 33 recites:

> 33.   Method according to claim 31,
> wherein the ATM sends performance data to a
> server which data indicate, for each
> individual transaction executed by the ATM,
> the type of transaction and the time of
> occurrence of the transaction.

Appellant points out that the "performance data" includes

the "type of transaction and the time of occurrence of the

transaction" for **each** transaction.

Point 1

Parent claim 31 states that each terminal contains means for

sending "performance data" to a server. The Office Action relies

on the "monitor" in Estes to show this (Estes column 1, line 46).

However, again, that "monitor" refers to the display, or

television screen, in Estes' ATM. That television screen does

not send performance data to a server.

Therefore, since the "performance data" of the parent claim

is absent from Estes, and since dependent claim 33 recites

characteristics of that "performance data," those characteristics

are necessarily absent from Estes.

By analogy, assume a parent claim recites an automobile, and

a dependent claim states that the automobile is green with silver

hubcaps.   If a reference fails to show an automobile, it cannot show a green automobile having silver hubcaps.

Point 2

It may be that Estes, column 3, lines 11 - 20, discusses a type of reporting made on the transactions done at the ATM. However, Estes explicitly states that any reporting is of a summary nature, and specifically excludes reports on "individual transactions."   (Column 3, line 15.)   That is directly contrary to claim 33.

Point 3

The Final Action cites Estes, column 2, lines 25 - 58. However, that passage in Estes does not state that any "performance data," as claimed, is sent to a "server," as claimed.

Conclusion as to Claim

Appellant submits that, even if the references are combined, claim 33 is not found.

These comments apply to claim 37.

CLAIM 34

Claim 34 recites:

34. Method according to claim 33,
wherein the ATM responds to commands received
from the server and for altering the
operation of the ATM.

The Final Action cites item 28 in Estes' Figure 1 to show

this claim.

Item 28 is a telephone line. A telephone line does not show

the subject matter of claim 34.

CLAIM 35

Claim 35 recites:

35. Method according to claim 31, and
further comprising:

a) transmitting performance data from the
ATM over a network to a server, which data is
representative of the occurrence of
operations carried out by the ATM; and

b) analyzing the data to determine volume of
transactions at particular times of the ATM.

The Final Action cites Estes, column 2, lines 25 - 58, to

show both claims 35(a) and (b).

Appellant will here outline that passage of Estes, to show

that the assertions of the Final Action are incorrect, and the

claim is not shown by the Estes-passage.

<u>Outline of Estes Passage</u>

All references are to column 2.

Lines 25 - 28. A regular ATM is to the right of line 12 of the Figure, and the "ATM enhancement system" is to the left.

Lines 29 - 37. Two processors are present. One is the "core computer" 16. The other is an "enhancement processor" 38 which "monitor[s] and record[s] the transaction."

Lines 38 - 58. A computer monitor and a printer are present in the ATM. Ordinarily, the core computer 16 controls them. But a switch 50 can connect them to the "enhancement processor" 38. If the enhancement processor 38 malfunctions, the core computer 16 takes over control of the monitor and printer.

<u>End Outline</u>

Therefore, the only discussion of a transaction in this passage is that the "enhancement processor" 38 "monitor[s] and record[s] the transaction." (Column 2, lines 36, 37.)

That fails to show the "transmitting" and "analyzing" of the "transaction," as claimed.

Claims 36 - 41

The Final Action, page 3, asserts that two items in Estes

show the recitations of these claims. The two items are

1) the computer monitor of Estes' column 1,

line 46,

and

2) column 2, lines 25 - 58 (this will be

called the "Column 2 Passage" herein, and

corresponds to the passage outlined above, on

the previous page).

Claim 36

Claim 36 recites:

> 36. Method according to claim 35,
> wherein the performance data is
> representative of customer usage of the
> terminal.

Estes' computer monitor clearly fails to show this claim.

The Column 2 Passage was outlined above, and clearly fails

to show this claim. For example, the "performance data" is

transmitted over a network to a server, by virtue of the parent

claim 35. The Column 2 Passage fails to show such "performance

data."

Claim 38

Claim 38 recites:

> 38. Method according to claim 31,
> wherein said time is predicted by analyzing
> historical data representing usage of the ATM
> over a predetermined period of time.

No "historical data," as claimed, is found in either Estes' monitor, or in Estes' Column 2 Passage.

No "analyzing," as claimed, is found in either Estes' monitor, or in Estes' Column 2 Passage.

Claims 39 - 41

These claims set forth specific items which are contained within the "historical data."
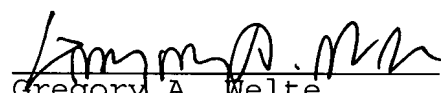
No such items, as claimed, are found in either Estes' monitor, or in Estes' Column 2 Passage.

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CONCLUSION

Applicant requests that the Board overturn the rejections and pass all claims to issue,

Respectfully submitted,

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ATTACHMENTS: -- CLAIMS APPENDIX,
                -- STATEMENT THAT NO EVIDENCE APPENDIX IS
                ATTACHED,
                and
                -- STATEMENT THAT NO RELATED PROCEEDINGS APPENDIX
                IS ATTACHED

8. CLAIMS APPENDIX

31. A method of operating an ATM, comprising:

a) charging customers for services rendered by the

ATM;

b) predicting a time when usage of the ATM by

customers will increase, and

c) increasing charges at the ATM during said time.

32. Method according to claim 31, wherein the time

coincides with public events occurring near the ATM.

33. Method according to claim 31, wherein the ATM sends

performance data to a server which data indicate, for each

individual transaction executed by the ATM, the type of

transaction and the time of occurrence of the transaction.

34. Method according to claim 33, wherein the ATM responds

to commands received from the server and for altering the

operation of the ATM.

35. Method according to claim 31, and further comprising:

a) transmitting performance data from the ATM over a

network to a server, which data is representative of

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the occurrence of operations carried out by the ATM;
and

b)   analyzing the data to determine volume of

transactions at particular times of the ATM.

36.   Method according to claim 35, wherein the performance

data is representative of customer usage of the terminal.

37.   Method according to claim 35, wherein the performance

data includes information representative of the type of

transactions and/or of the time at which transactions are

initiated at the ATM.

38.   Method according to claim 31, wherein said time is

predicted by analyzing historical data representing usage of the

ATM over a predetermined period of time.

39.   Method according to claim 38, wherein the historical

data includes information about the type of transactions carried

out at the ATM.

40.   Method according to claim 39, wherein the historical

data includes information about the time at which transactions

have been carried out at the ATM.

41.   Method according to claim 38, wherein said historical data pattern includes information about the volume of transactions carried out at the ATM at different times of the day or on different days, or both.

9.   EVIDENCE APPENDIX

None.

10.   RELATED PROCEEDINGS APPENDIX

None.